



The
Institution of Engineers,
Australia
Western Australia Division

Raising Mundaring Weir 50th Anniversary



Commemorative Plaque
Unveiling Ceremony

Friday, 14 December 2001
Mundaring Weir

Proudly presented by

*The Institution of Engineers, Australia
WA Division & Water Corporation*



The
Institution of Engineers,
Australia



Program

Welcome

Prof Peter Lee FIEAust CPEng
President, WA Division
The Institution of Engineers, Australia

History

Mr Bruce James OAM Hon FIEAust CPEng
Chairman, Engineering Heritage Panel
WA Division
The Institution of Engineers, Australia

Unveiling of the Commemorative Plaque

Hon. Nick Griffiths MLC
Minister for Government Enterprises

Acceptance of the Commemorative Plaque

Mr Don Young FIEAust CPEng
Director
Water Corporation

Morning Tea

The Goldfields, Agricultural Areas and Great Southern Towns Water Supply Scheme

At the end of World War II only a small number of country towns had reticulated water; and of these many were subject to severe restrictions and the water was of indifferent quality. Despite an above average rainfall in 1945, the drought of the previous year had exposed the fragile nature of many of the supplies. In February and March of 1945 the position in some areas became desperate and water carting was widespread. These water shortages provided the incentive to implement the Comprehensive Agricultural Areas Water Supply Scheme, which had been under consideration since the late 1930s.

The Comprehensive Scheme was designed to provide supplies to towns in the Great Southern District and water for domestic and stock watering purposes to a large area of farmland in the central and north-eastern wheat-belt and the Great Southern, stretching from Dalwallinu in the north to Tambellup in the south. After discussions with the Commonwealth it was agreed to implement a Modified Comprehensive Scheme in which a much smaller area of farmland would be serviced from the Goldfields main conduit and the Great Southern towns would be supplied from Wellington Dam.

For the farmland supplies branch mains ran north and south from the main conduit to service-reservoirs located on commanding heights from which water was distributed to surrounding areas by gravity. Service-reservoirs provided five days storage under maximum demand condition.

From Wellington Dam water was pumped by two pumping stations through a 760 millimetre diameter pipeline to Narrogin Reservoir. From Narrogin a third pumping station pumped water north to a hill from where it gravitated north to Brookton. A southwards running main allowed water to gravitate to Katanning service reservoir.

Between 1965 and 1974 further areas of farmland were added to the scheme in the Great Southern Region and in the west-central and north-western parts of the original area covered by the Comprehensive Scheme and along its northern boundary. By 1974 4.2 million hectares of farmland were serviced by the scheme.

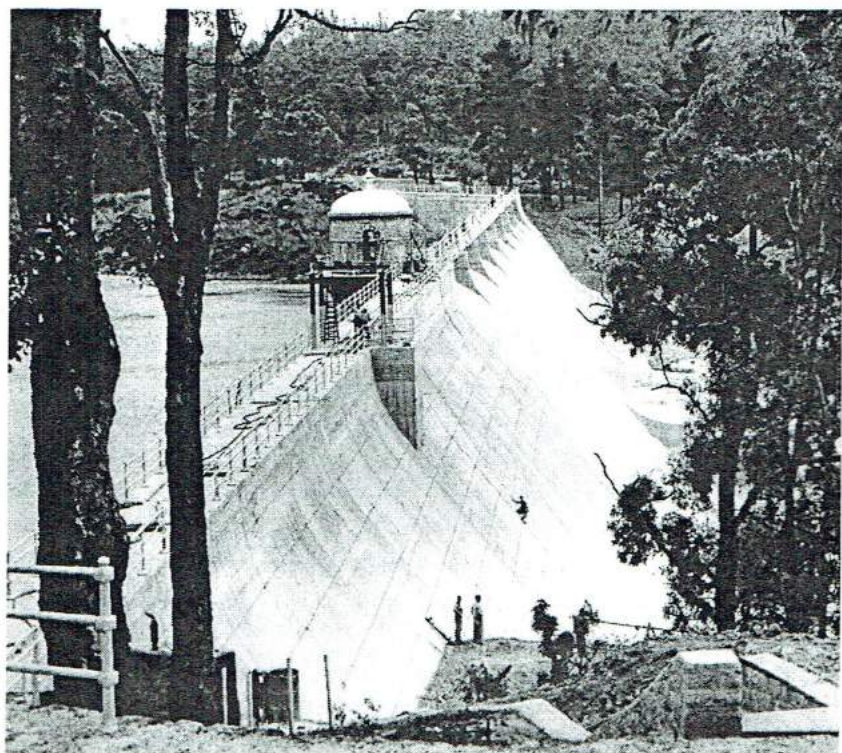
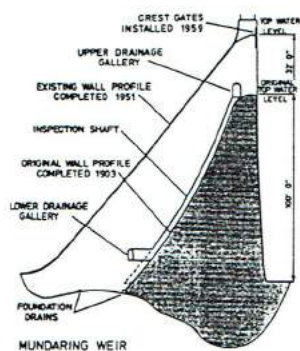
Raising Mundaring Weir 1946-1951

The raising of Mundaring Weir, and later Wellington Dam, was funded totally by the State Government. The commencement of construction, therefore, did not have to await an agreement between the Commonwealth and Western Australia on the funding of the Comprehensive Agricultural Areas Water Supply Scheme, which the raised dams were planned to supply.

Construction work started in 1946 using day labour directly controlled by Public Works Department engineers. For almost all of the construction period the Resident Engineer was Harold Hunt, operating under the control of Don Munro, the Principal Assistant Hydraulic Engineer. Throughout the project both skilled and unskilled workers were very scarce and for the last three years of the works the majority of workmen were newly arrived migrants. Many of the workers lived in a construction camp that was set up below the dam in an area opposite the No 1 Pump Station.

Placing of concrete started in April 1948 but was delayed by power breakdowns and an acute shortage of cement. At Mundaring the Department followed an innovative concreting practice, pioneered on an American dam, which kept the new section of wall as free as possible from the old wall during the setting of the new concrete. This was achieved by forming a series of hollow slots and ribs in the new concrete along the contact surface. After the new concrete had become sufficiently stabilised, the slots were filled in. The original 1903 steel and timber walkway, with its distinctive curved steel handrail, and the round copper-roofed gatehouse were carefully removed and then replaced on the raised dam.

The raising increased the height of the weir by ten metres to 42 metres and raised the storage capacity to just under 64 million cubic metres. The work was opened officially by Premier McLarty on 14 December 1951.



This plaque was unveiled by

HON. NICK GRIFFITHS MLC
MINISTER FOR GOVERNMENT ENTERPRISES

on 14 December 2001

to mark the

50th Anniversary
of raising Mundaring Weir (1946 – 1951)

and

augmentation of the

Goldfields and Agricultural Areas Water Supply Scheme



Prof PETER LEE
President
Western Australia Division



Hon PETER JONES AM
Chairman

WESTERN AUSTRALIA Goldfields and Agricultural Areas Water Supply Scheme

